

THE OFFICE ACTION

The following rejections were noted in the Office Action.

Claims 21 and 24-29 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,110,546 to Honda et al. ("Honda").

Claims 22 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Honda in view of U.S. Patent 3,646, 155 to Scott et al. ("Scott").

REMARKS

The Office Action mailed January 30, 2003 has been given careful consideration by the Applicants. Reconsideration of the application is hereby respectfully requested in view of the above amendments and the following comments. Claims 21-30 remain pending in the application.

I. Claims 21 and 24-29 are not anticipated by Honda

The Examiner rejected claims 21 and 24-29 under 35 U.S.C. 102(e) as being anticipated by Honda. Applicants respectfully disagree that the claims of the present invention are unpatentable over Honda.

As previously detailed, Honda discloses an automobile weatherstrip including a weatherstrip body formed from a rubber polymer and a decorative layer formed from a thermoplastic elastomer (TPE) and hydrotalcite as a discoloration preventing agent. The rubber polymer of the weatherstrip body can comprise, for example, a sulfur vulcanize-ethylene- α -olefin non-conjugated-diene copolymer rubber (EODM). The thermoplastic elastomer of the decorative layer can be an olefinic thermoplastic elastomer (TPO) or a styrenic thermoplastic elastomer (TPS). If the TPE is a TPO, then the TPO comprises an olefinic resin and an ethylene- α -olefinic copolymer rubber (col. 4, lines 11-13). The olefinic resin can include polypropylene, polyethylene and copolymers of propylene. The ethylene- α -olefinic copolymer rubber

of the TPO can include ethylene- α -olefinic copolymer rubbers (EOR). The EOR can have a crosslinked, partially crosslinked or non-crosslinked structure (col. 4, lines 63-67).

Independent claims 20 and 29, from which the remainder of the rejected claims depend, recite a composite extrusion having an at least partially crosslinked thermoplastic decorative layer wherein said thermoplastic is selected from the group consisting of a moisture crosslinkable ethylene- α -olefinic copolymer and a moisture crosslinkable copolymerized ethylene-styrene copolymer bonded to an elastomer rubber main body member.

The cited claims of the present application are not anticipated by the Honda patent. In order to properly reject a claim under §102, each and every element of the claimed subject matter must be disclosed in a single prior art reference. Here, even assuming that the other elements of the present invention and the Honda patent are the same, the composition of the claimed decorative layer is significantly different than the teachings of Honda.

As detailed above, Honda discloses a TPO including an ethylene- α -olefin copolymer rubber. The present invention, on the other hand, recites a weather strip having a decorative layer comprising a moisture crosslinkable thermoplastic. This thermoplastic may be an ethylene- α -olefin thermoplastic. Although Honda does disclose the use of an ethylene- α -olefin copolymer for use in the decorative layer described therein, these compositions as described in Honda are such as to render them rubbers rather than thermoplastics as claimed in the present invention. In addition, there is no indication that the olefinic resin, which is the only material that may be properly described as a thermoplastic in Honda, can be at least partially crosslinked as required by the present claims (see col. 4, lines 16-27). Thus, because Honda fails to disclose a decorative layer comprising an at least partially crosslinked thermoplastic, it fails to anticipate the present claims.

Further, Honda fails to disclose a moisture crosslinkable polymeric compound. In this respect, Honda does disclose that the ethylene- α -olefin copolymer

rubbers may be crosslinked. However, Honda only discloses the use of peroxide as a crosslinking agent (col. 4, lines 63-68, and col. 5, lines 1-5). As is known in the art, peroxide crosslinking agents are not moisture crosslinking agents. Thus, Honda fails to disclose a moisture crosslinkable thermoplastic for use as the decorative layer. For at least these reasons, Honda fails to anticipate the present claims.

II. Claims 22 and 23 are not rendered obvious over Honda in view of Scott

The Examiner rejected claims 22 and 23 under 35 U.S.C. §103(a) as being unpatentable over Honda in view of Scott. Applicants respectfully disagree that the claims of the present invention are obvious over Honda in view of Scott.

The pertinent portions of the disclosure of Honda are set forth above. Scott discloses a process for crosslinking a polyolefin by grafting silane functional groups to the polymer background and subsequently exposing the product to moisture in the presence of a silanol condensation catalyst. Scott discloses one method in which the moisture crosslinkable thermoplastics in the present invention may be crosslinked.

Initially, there is no motivation to combine the two references. To properly combine references under 35 U.S.C. §103(a), there must be some suggestion or motivation to do so. Here, the Examiner states that Scott teaches "the crosslinking of olefin copolymer using a silane compounds such that the crosslinking may be carried out in two stages and yields a product that has extremely high resistance to stress cracking and could be employed in extruded articles. Accordingly, it would have been obvious to one having ordinary skill in the art to crosslink the ethylene-octene copolymer disclosed by Honda et al. with a silane compound given that Scott et al. specifically teach that doing so yields a product that has extremely high resistance to stress cracking and could be employed in extruded articles."

The Examiner improperly relies on the disclosure of Scott in making the above statement. As stated in column 5, lines 14-17, of Scott "Cross-linked polyolefins produced according to this invention are characterized by physical properties which are comparable to those obtained by conventional methods i.e. by

organic peroxide cross-linking.” Thus the resistance to stress cracking in crosslinked polyolefins is no greater when using the silane compound disclosed in Scott as compared to using an organic peroxide crosslinking method. Thus, the silane crosslinking disclosed in Scott would provide no additional motivation for one seeking to improve stress cracking resistance in an extruded polyolefin.

Further, there is no indication in Honda that superior stress cracking resistance is desired. Honda simply seeks to provide an automobile weather strip which is both economical to produce and does not undergo discoloration (col. 1, lines 53-55). Thus, one practicing the invention of Honda would not be motivated to increase the resistance to stress cracking in the weather strips. Similarly, even assuming the presence of such motivation, there would be no suggestion to apply the teachings of Scott in the manufacture of such weather strips since the method disclosed in Scott only provides crosslinked polyolefins having comparable properties to those obtained via conventional crosslinking methods.

Finally, even if the references could somehow be combined, they would not meet all the recitations of the present claims. As detailed above, Honda clearly fails to disclose a crosslinkable thermoplastic. It only discloses a crosslinkable ethylene- α -olefin copolymer rubber. Thus, even if there was proper motivation to combine the two references, the most such a combination would disclose would be a silane grafted crosslinkable ethylene- α -olefin rubber, which is clearly distinguishable from the crosslinkable thermoplastic of the present claims. For at least these reasons, the combination of Honda and Scott fails to render the present claims unpatentable under 35 U.S.C. §103(a).

CONCLUSION

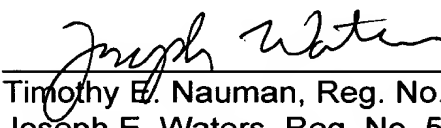
In view of the foregoing, Applicants submit that claims 21-30 are in condition for allowance. Applicants respectfully request early notification of such allowance. Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned in an attempt to resolve any such issues.

If any fee is due in conjunction with the filing of this Response, Applicants authorize deduction of that fee from Deposit Account 06-0308.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & MCKEE, LLP

Date: 3-21-03



Timothy E. Nauman, Reg. No. 32,283
Joseph E. Waters, Reg. No. 50,427
1100 Superior Avenue
Seventh Floor
Cleveland, OH 44114-2518
216/861-558

C:\DATA\JEWMAR\CSA2178.AMD